

LISTING OF THE CLAIMS

1. – 8. (Cancelled)

9. (Currently Amended) A ~~method for producing~~ material comprising a radar emissions-absorbing material carbon foam manufactured by a process comprising the steps of:
heating particulate coal in a pressurized non-oxidizing atmosphere having a pressure in the range of about 50 psi to about 500 psi, to a temperature in the range about 300° C to about 600° to form a green foam; and
carbonizing said green foam to form a carbonized foam by heating said green foam to a maximum temperature ranging from about 600°C to about 800°C, and soaking at this temperature for about 2 to about 30 minutes, ~~thereby to produce~~ producing a carbonized foam which exhibits a dielectric constant in the range of about 2 to about 6 and an electrical resistivity in the range of about $1.E^{+00}$ ohm-cm to about $1.E^{+06}$ ohm-cm.

10. (Currently Amended) The material ~~method~~ of claim 9, wherein said particulate coal exhibits a free swell index of between about 3.75 and about 4.5.

11. (Currently Amended) The material ~~method~~ of claim 9, wherein said particulate coal exhibits a free swell index in the range of about 3.5 to about 5.

12. – 24. (Cancelled)

25. (New) The material of claim 9, wherein said maximum temperature ranges from about 600°C to about 700°C.

26. (New) The material of claim 9, wherein said soaking ranges from about 5 minutes to about 20 minutes.

27. (New) The material of claim 9, wherein said carbonized foam has a density ranging from about 0.1 g/cc to about 0.8 g/cc.

28. (New) The material of claim 9, wherein said carbonized foam has a density ranging from about 0.1 g/cc to about 0.6 g/cc.

29. (New) A radar emissions absorbing body comprising:
carbon foam on a surface of a body, wherein said carbon foam has the properties of a dielectric constant in the range of about 2 to about 6 and an electrical resistivity in the range of about $1.E^{+00}$ ohm-cm to about $1.E^{+06}$ ohm-cm.

30. (New) The radar emissions absorbing body of claim 29, wherein said carbon foam has a density ranging from about 0.1 g/cc to about 0.8 g/cc.

31. (New) The radar emissions absorbing body of claim 29, wherein said carbon foam has a density ranging from about 0.1 g/cc to about 0.6 g/cc.

32. (New) A material comprising carbon foam having a dielectric constant from about 2 to about 6 and an electrical resistivity from about $1.E^{+00}$ ohm-cm to about $1.E^{+06}$ ohm-cm.

33. (New) The material of claim 32, wherein said carbon foam is prepared from at least one selected from the group consisting of: particulate coal, coal tar pitch, petroleum pitch and carbonized polymeric materials.

34. (New) The material of claim 32, wherein said carbon foam is a coal-based carbon foam.

35. (New) The material of claim 34, wherein said carbon foam is derived from particulate coal exhibiting a free swell index from about 3.5 to about 5.0.

36. (New) The material of claim 32, wherein said coal-based carbon foam is a porous coal-based product having a density ranging from about 0.1 g/cm^3 to about 0.8 g/cm^3 .

37. (New) The material of claim 32, wherein said carbon foam has a density ranging from about 0.1 g/cc to about 0.6 g/cc .